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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,374	09/26/2003	Yong Chcol Park	0465-1036P	6884

2292 7590 12/26/2006  
BIRCH STEWART KOLASCH & BIRCH  
PO BOX 747  
FALLS CHURCH, VA 22040-0747

EXAMINER
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PHAM, VAN T

ART UNIT	PAPER NUMBER
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2627

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	12/26/2006	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 12/26/2006.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

**Office Action Summary**

Application No.

10/670,374

Applicant(s)

PARK ET AL.

Examiner

VAN T. PHAM

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 5-9, 15-17, 23-26, 28-32, 38 and 39 is/are pending in the application.
- 4a) Of the above claim(s) 4, 10-14, 18-22, 27, 33-37 and 40-42 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-9, 15-17, 23-26, 28-32, 38 and 39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

*Election/Restrictions*

1. Applicant's election with traverse of Species in the reply filed on 10/26/2006 is acknowledged. The traversal is on the ground(s) that all the species together in one application would not place an undue burden on the Examiner. This is not found persuasive because the feature of "allocating at least one replacement area and a plurality of temporary defect management area ...wherein the temporary defect management areas are separately provided" and " recording defect management information on at least one of the plurality of temporary defect management areas" are not the same search and which would require a different subclass search; therefore it is an undue burden on Examiner.

The requirement is still deemed proper and is therefore made FINAL.

*Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 is not a complete sentence and which could not understood.

*Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3, 16, 23-26, 39 are rejected under 35 U.S.C. 102(e) as being anticipated by Takahashi (US 2006/0077827).

Regarding claim 1, Takahashi discloses a method of managing defects on a write-once optical recording medium having at least one recording layer, the method comprising the steps of: allocating at least one replacement area and a plurality of temporary defect management areas to the optical recording medium (see Fig. 5), wherein the temporary defect management areas are separately provided (see Fig. 5); and recording defect management information on at least one of the plurality of temporary defect management areas (see Fig. 5 and [0074] and [0103]).

Regarding claim 2, see Fig. 5, discloses the method of managing of claim 1, wherein in the allocating step, at least one of the plurality of temporary defect management areas is allocated to an inner circumferential area of the optical recording medium and at least one of the plurality of temporary defect management areas is allocated to an outer circumferential area of the optical recording medium (see Fig. 5).

Regarding claim 3, see Fig. 5, discloses the method of managing of claim 1, wherein in the allocating step, one of the plurality of temporary defect management areas is provided in a lead-in area of the optical recording medium (noted: assuming the claim 3 is similar to claim 26, therefore if there were a typo of claim 3 then see the full rejection below of claim 26).

Regarding claim 16, see Fig. 6 and [0076], discloses the method of managing of claim 1, wherein in the step of recording, said defect management information includes at least one temporary defect list (TDFL) and at least one temporary disc definition structure (TDDS).

Regarding claims 23-24, see rejection above of claim 1 and see Fig. 12.

Regarding claim 25, see rejection above of claim 2.

Regarding claim 26, see Fig.5 and [0074], discloses the optical recording medium of claim 24, further comprising: a lead-in area, wherein one of the plurality of temporary defect management areas is provided in the lead-in area of the optical recording medium and one of the plurality of temporary defect management areas is provided at an end portion of the data area of the optical recording medium (noted; the DMA reserved areas may be arranged in the spare area where the spare area is located at the end of the data area).

Regarding claim 39, see rejection above of claim 16.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 15 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi (US 2006/0077827) in view of the Martens (US 2005/0083830).

Regarding claim 15, Takahashi discloses the recording medium as claimed in claim 1.

Martens discloses an optical recording medium is a write-once blu-ray disc (BD-WO) (see Fig. 11 and [0122]).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide an optical recording medium is a write-once blu-ray disc Takahashi, as suggested by Martens, the motivation being in order have a high-density recording by using a short-wavelength (see Martens [0027]).

Regarding claim 38, see rejection above of claim 15.

7. Claims 5-9, 17 and 28-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi (US 2006/0077827) in view of the Martens (US 2003/0137909).

Regarding claim 5, see Takahashi Fig. 5, discloses the method of managing of claim 1, wherein the step of allocating further comprises: allocating at least one outer spare area, a portion of which is used as a replacement area to replace a defective area (see Fig. 10); and allocating a portion of at least one of the at least one outer spare area as a temporary defect management area to manage defect management information (see [0074]).

Ito, see Fig. 5, discloses a step of allocating at least one inner spare area, at least a portion of which is used as a replacement area to replace a defective area; allocating at least one outer spare area, a portion of which is used as a replacement area to replace a defective area (see Fig. 5); and allocating a portion of at least one of the at least one outer spare area and the at least one inner spare area as a temporary defect management area to manage defect management information (see abstract).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide at least one inner spare area, at least a portion of which is used as a replacement area to replace a defective area; allocating at least one outer spare area in Takahashi, as suggested by Ito, the motivation being in order have each defect management region 12 duplicatively stores the same content (see Ito [0017]).

Regarding claim 6, the combination of Takahashi and Ito, discloses the method of managing of claim 5, wherein in the step of allocating, the at least one inner spare area includes a

first inner spare area, an entire allocated area of which is used to replace a defective area (see Takahashi Fig. 5 and Ito Fig. 5).

Regarding claim 7, the combination of Takahashi and Ito, discloses the method of managing of claim 5, wherein in the step of allocating, the at least one inner spare area includes a first inner spare area allocated to a beginning portion of a data area, and the at least one outer spare area includes a first outer spare area allocated to an ending portion of the data area (see Takahashi Fig. 5 and Ito Fig. 5).

Regarding claim 8, see Takahashi Fig. 5, discloses the method of managing of claim 1, wherein a first one of the temporary defect management areas and a second one of the temporary defect management areas have a fixed size.

Ito, see [0016] discloses a first one of the temporary defect management areas has a fixed size, whereas a second one of the temporary defect management areas has a variable size.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide at least one inner spare area, at least a portion of which is used as a replacement area to replace a defective area; allocating at least one outer spare area in Takahashi, as suggested by Ito, the motivation being in order have an increase of defect sectors which goes beyond expectation can be handle (see [0016]).

Regarding claim 9, the combination of Takahashi and Ito, discloses method of managing of claim 8, wherein in the step of allocating, the first one of the temporary defect management areas is allocated to a lead-in area, and the second one of the temporary defect management areas is allocated to an outer spare area (see Takahashi [0074]-[0076] and Ito [0016]).

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Regarding claim 17, the combination of Takahashi and Ito, discloses method of managing of claim 8, wherein the first and second ones of the temporary defect management areas are used sequentially with respect to one another (see Takahashi Figs. 5, 7-8 and [0075]).

Regarding claims 28-32, see rejection above of claims 5-9, respectively.

*Cited References*

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The cited references relate to spare are with a predetermined capacity for a detective sector allocated in each zone, recording apparatus, and recording method; Information recording medium, recording apparatus, reproduction apparatus, recording method, reproduction method and defect management method.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VAN T. PHAM whose telephone number is 571-272-7590. The examiner can normally be reached on Monday-Friday from 9:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571-272-7582. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VP

  
WAYNE YOUNG  
SUPERVISORY PATENT EXAMINER